# WebQuests in Family Nursing Education: the Learner's Perspective

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#### **Abstract**

WebQuests are an interactive teaching strategy that uses faculty-designed Internet web pages to develop higher-order thinking skills, such as analysis, application, and reflection. The WebQuest activity engages learners to build knowledge in authentic contexts. However, there is limited educational research in nursing on the use of WebQuests. This mixed-methods study used a qualitative and quantitative survey approach to evaluate WebQuests as a teaching/learning strategy related to family nursing education from the learner's perspective. The constructs of focus used were active learning, facilitation, and family nursing. A descriptive quantitative and descriptive qualitative with content analysis design was used in the study. This research study examined the nursing learner's perspective of WebQuests for teaching/learning family nursing content. A majority of participants reported active engagement in learning, the use of analysis, reflection, discovery, and that the WebQuest included helpful sources. Additionally, the WebQuest activity prompted learners to think of ways to interact with patients and families. Overall, participants reported an enjoyable experience with using the WebQuest activity.

**Keywords:** WebQuests; teaching/learning strategy; active learning; facilitation; family nursing

## 1.0 Introduction

WebQuests are web-based, inquiry-focused teaching/learning activities that use higher-order learning skills(Dodge, 1995) in which learners use the Internet to search for information to discover answers to questions, such as a real-life problem(Halat, 2008a; Russell et al., 2008). The WebQuest is a learner-centered strategy for engaging learners in the new development of knowledge or meaning (Lahaie, 2007; Lahaie, 2008). Although K-12 education and university disciplines other than nursing have widely used (Zheng, Perez, Williamson, & Flygare, 2008) and studied WebQuests (Abbit & Ophus, 2008; Kurt, 2012; Alias et al., 2013) there is a gap in the research literature regarding the use of WebQuests as a teaching strategy in nursing education. Further, Mastrian, McGonigle, Mahan, and Bixler (2011) identify a gap in the research literature in nursing education related to WebQuests. Lahaie (2008) calls for research on WebQuest implementation and evaluation at the college and university level in nursing education. This research study examined the learner's perspective of WebQuests as an instructional and learning tool for family nursing content.

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# 2.0 Background and Significance

WebQuests are instructor-designed webpages that incorporate teaching/learning activities that engage learning to explore information (Brewer, 2003). WebQuests provide a vehicle for students to discuss concepts, use critical thinking, and utilize problem solving.

The use of the acronym FOCUS for teachers to develop WebQuests (Dodge, 2001) is one practice: "F" is for find great sites; "O" is for orchestrate learners and resources; "C" is for challenge learners to think; "U" is for use the medium; "S" is for scaffold high expectations.

A WebQuest has six attributes: introduction, task, resources, processes, evaluation, and conclusion (Dodge, 1995). The introduction presents the main topic along with some background information. See Figure 1 for an example of an introduction page. The task explains for the learners what it is they are to learn by the end of the WebQuest. A compiled list of sources used for the WebQuest is located in resources. The process gives the learner detailed directions on how to complete the task. The evaluation includes the assessment for the learner's work, such as a rubric. The conclusion reviews the main aspects of the WebQuest activity and encourages learner reflection (Dodge, 1995).

Nursing WebQuest: Patients and Families with Chronic Illness

Image 1.1 Example of a Nursing WebQuest Introduction Page

# Introduction Task Process Evaluation Conclusion Credits Teacher Page Chronic illness is an important concept for nurses to understand. Understanding the meaning, trajectory, family influence, and impact that a chronic illness has on a family is important for the nurse who helps patients and families dealing with a chronic illness. This Nursing WebQuest focuses on chronic illness and the practice of family focused nursing care.

Figure 1.1. Visual example of a Nursing WebQuest entitled *Patients and Families with Chronic Illness*. The introduction page presents the main topic with background context. The menu on the left has the pages of the WebQuest for navigation.

Developing an understanding of what chronic illness means and how it impacts patients and families is a critical skill for nurses. The topic of patients and families with chronic illness is explored in this Quest.

The National League for Nursing (NLN) supports an increase in the use of technology in nursing education (2008). A WebQuest is a type of educational technology used to instruct about a number of topics. In addition, the NLN supports educational research aimed at studying teaching and learning practice (2007).

An important note to stress is that WebQuests are not intended for use as memorization of information, but are intended for higher level learning such as creating, developing, inquiry, analysis, reflection, synthesis and evaluation (Bassendowski, 2007; Dodge, 2001; Sanford, Townsend-Rocchiccioli, Trimm & Jacobs, 2010).

The purpose of this study was to survey the perspectives of undergraduate nursing students ata Midwestern University regarding the use of WebQuests as a teaching/learning strategy for family nursing content. The philosophy of constructivism that recognizes learning as an active process in which building knowledge occurs in addition to the acquisition of knowledge (Perkins, 1991) guided this study. A multi-paradigm learning experience approach was used to examine the learner's perspective. The active learning paradigm, facilitation paradigm, and family nursing paradigm are the focus for this evaluation project.

#### 3.0 Review of the Literature

#### 3.1 WebQuests and Learner Outcomes

One of the major purposes for WebQuests is to promote higher level thinking in learners. Lim and Hernandez used WebQuests in a master's level course in family therapy (2007). The WebQuest included a family therapy case study simulation. Evaluation by student participants included the WebQuest motivated students to learn more, the WebQuest case study had real-world implications, promoted critical thinking, and expanded global thinking (Lim & Hernandez, 2007).

WebQuests are interactive teaching/learning strategies to solve a problem using higher order thinking. Gulbahar, Madran and Kalelioglu (2010) studied the development and evaluation of interactive WebQuests in 92 higher education students who were computer programming and education majors. The interaction designed into the WebQuest site allowed for communication between the instructor and learner regarding projects. Learners designed WebQuest and received feedback about the projects via the WebQuest. The study included two phases. The first phase studied student perceptions about the WebQuest using a questionnaire and focus group interview. After a revision of the WebQuest, 27 students completed a questionnaire evaluation of the WebQuest in the second phase. Gulbahar, Madran, and Kalelioglue (2010) report that the students found the WebQuest favorable to use and was a positive learning experience. Participants reported the WebQuest project contributed to learning how to solve real-life problems. Participants described exploring other viewpoints as a beneficial aspect of the WebQuest activity.

Other investigations focus on outcomes of learning related to the use of WebQuests. Zacharia, Xenofontos, and Manoli (2011) studied the use of two cooperative learning methods within WebQuests for any differences. The project focused on a comparison of the jigsaw cooperative approach and the traditional approach. Students in the jigsaw cooperative approach group studied resources through use of a WebQuest. Students in the traditional approach group explored web-based learning material not designed into a WebQuest. No differences were found in 38 seventh-graders in regards of understanding the learning concepts. Other researchers have reported no improved learning outcomes in a variety of K-12 grade levels and higher education disciplines (Abbit & Ophus, 2008; Barbour, Rieber, Thomas, & Rauscher, 2009; Gaskill, McNulty, & Brooks, 2006).

Contrary to the studies showing no improved learning outcomes with the use of WebQuests, other researchers have found that learners have better learning outcomes with the use of WebQuests. Student participants reported improved reading skills and improved vocabulary through WebQuest use in a reading course (Tuan, 2011). A study of the effects of WebQuest use by foreign language learner's and their writing performance reported by Lee (2013) found improved writing performance.

Abdelaziz (2012) reported that WebQuest use improved the teaching performance and quality of teaching in business education pre-service teachers.

Alshumaimeri andBamanger (2013) investigated writing performance in students using the WebQuest teaching/learning strategy. The study included random assignment of fourteen Saudi male college students into a WebQuest experimental or traditional teaching/learning control group. A prepost-test design controlled for differences between learner's proficiency levels.

Higher writing performance was present in students who used the WebQuest when compared to traditional teaching/learning strategies (Alshumanimer & Bamanger, 2013). Students using the WebQuest strategy improved their learning outcomes in writing skills.

Halat (2008b) studied the effects of WebQuests with 202 pre-service elementary school teachers in mathematics. An experimental design was used with pre-test and post-test survey measures. The Course Interest Survey (CIS), a 34-item statement, Likert-type rating scalewas used. The CIS consists of four constructs: attention, relevance, confidence, and satisfaction. The treatment group scored higher than the control group, indicating that teachers in the course who developed WebQuests in preparation for their elementary students scored higher in the course than teachers who did not develop a WebQuest. Halat (2008b) concluded that WebQuest activities in a college level mathematics course improved attitudes of teachers toward the teaching and learning of mathematics.

#### 3.2 WebQuests and Facilitation

Zheng, Stucky, McAlack, Menchana, and Stoddard (2005) examined the perception of 207 students (non-nursing) at the college/university level about the use of WebQuest learning. The constructs used were critical thinking, knowledge application, social skills, and scaffold learning. After an analysis of the results of the survey, a re-structuring of the constructs was completed to constructivist problem solving, social interaction, and scaffold learning. The researchers explain that this information can help educators who design WebQuests to understand best practices for the design (Zheng et al., 2005). The authors recommend need for more research to evaluate WebQuests from the learner's perception (Zheng et al., 2005).

Researchers conducted an evaluation study of the effectiveness of WebQuests as a computer-based learning tool, using survey and focus groups methods in adult learners between the ages of 18 and 30 years (Hassanien, 2006). The students were studying tourism management, hospitality management, and leisure management. Participants found WebQuests to be a stimulating activity. Researchers reported that 89.7% of participants would recommend the WebQuest experience to other learners. One limitation noted by Hassanien (2006) is that it does take time to acquaint learners to the WebQuest strategy.

The research related to the use of WebQuests in nursing education is sparse. Drozd and O'Donoghue (2007) designed a WebQuest for student use and evaluation based on the literature. A study of 11 undergraduate nursing students examined the use of the WebQuest teaching/learning strategy. Researchers used a qualitative questionnaire instrument (Drozd & O'Donoghue, 2007). Participants reported liking the informational resources available on the WebQuest, a reinforcement of understanding, but some had difficulties with navigating the WebQuest. The evaluation of the WebQuest from the student point of view was positive (Drozd & O'Donoghue, 2007).

Burchum et al. (2007) studied the use of WebQuests in nursing students that were designed to help students develop skills to access information through using library databases for coursework. A convenience sample of 33 nursing students at the University of Tennessee Health Science Centers College of Nursing used WebQuests in their coursework and then completed a survey evaluation (quantitative and qualitative) of WebQuests. Some participants were skilled in using technology in education, while others had no previous experience.

The WebQuests were designed to help students develop skills to access information through using library databases for coursework. The authors reported that students found the WebQuests helpful in distinguishing authoritative sources, accessing library databases, participating in group work, and in being engaged in student-centered activities.

Qualitative comments from participants included a summary of satisfied comments, such as learning to search the databases was helpful for all coursework, and dissatisfied comments, such as working in groups in which not all members were well-prepared or did quality work for the assignments (Burchum et al., 2007). The WebQuest is as an effective activity to use in nursing education as a learning strategy (Burchum et al., 2007). The sample size in this study was small, although this is typical when piloting a new strategy in a course due to course size. Similar studies of WebQuest use in nursing education will provide more confidence in this teaching and learning strategy.

# 4.0 Study Paradigms

#### 4.1 The Active Learning Paradigm

Active learning is student engagement in the acquisition of new knowledge and meaning. Numerous teaching/learning strategies such as writing, discussion, reflection, small group discussions, reading and reflection exercises, gaming, and simulation promote active learning. Felder and Brent (1996) explain that by using student-centered instruction, such as role-plays, cooperative learning, and open-ended problem solving, that students are more active and engaged in their learning. WebQuests are an active learning strategy, focus on the higher order thinking skills of creating, analysis, reflection, synthesis, and evaluation (Dodge, Molebash, Bell, Mason, & Irving, 2002), so that learners develop their own new knowledge and meaning, which is consistent with the philosophy of constructivism (Lahaie, 2008). Thus, one critical attribute of active learning is that the learner is at the center of learning and is active in discovering information. A second critical attribute of active learning is that the learner is engaged in an activity, whether it is writing, speaking, reflecting, creating, or any other active endeavor.

# 4.2.1The Facilitation Paradigm

Facilitation is assisting a group of people to obtain their educational objectives or goals. The tone of the course, direction, educational environment, and activities are part of the facilitation of an educational activity (Horsfall& Cleary, 2008). Creating a comfortable learning environment was found by Sargeant, Curran, Allen, Jarvis-Selinger and Ho (2006) to be vital when facilitating education. Application of the facilitation of WebQuests includes the design of the WebQuest by the educator. Facilitation is learner focused and includes the principles of adult learning (Riggs, DeSilets & Dickerson, 2010). The following principles are compiled and serve as the adult learning principles for the WebQuest research project (Lieb, 1991; Riggs, DeSilets & Dickerson, 2010).

#### 4.2.2 Every Person Learns At a Different Rate

One advantage of using WebQuests is that each learner is able to progress at their own pace through their own self-direction. The focus of WebQuests is on the positive; learning can be overwhelming at times and facilitators should often remind learners to focus on the positive.

#### 4.2.3All Persons Learn in Different Ways

Some people learn best from hearing while others learn well from seeing or doing. Words may work best for some learners when tackling a new concept, while figures may help others the best.

Facilitators should provide a variety of medium, especially with difficult concepts to help learners be successful. Facilitation includes a review or identification of basic knowledge and then builds on the knowledge base. This is consistent with constructivism and is easy to facilitateby using WebQuests.

# 4.3 The Family Nursing Paradigm

Family nursing for this project refers to including the family in the practice of nursing. It is important to recognize that the family system is influenced by the health of each individual member (Kaakinen, Gedaly-Duff & Hanson, 2009). The definition of family is two or more persons who support each other emotionally, physically, and economically (Kaakinen, Gedaly-Duff & Hanson, 2009). Family nursing content was integrated into the WebQuests in this project to promote the act of including the family in nursing.

#### 5.0 Methods

# **5.1 Purpose**

The purpose of the project was to study the use of WebQuests in nursing education from the learner's perspective. Participants answered questions specific to the constructs of active learning, facilitation, and family nursing related to WebQuests. The intent was to provide educators with valuable information on what is effective in the WebQuest design for nursing learners. Suggestions for improvement were also identified so that nurse educators can continue to modify the WebQuest use to improve the teaching/learning quality.

#### **5.2 Research Questions**

The research questions were:

- 1. What are the strengths of using a WebQuest for learning from the learner's point of view?
- 2. What are facilitation successes and areas for improvement with using the WebQuest from the learner's point of view?
- 3. What are factors that relate to including the family nursing content in WebQuests from the learner's point of view?

#### **5.3Design and Participants**

The study used a mixed-methods design to describe and document aspects of WebQuest use from the learner's perspective. The mixed methods approach gives participants an opportunity to provide comments so researchers can better understand their perception of WebQuests. This technique can extend and complete the data collection (Adami & Kiger, 2005; Williamson, 2005). A convenience sample of 28 undergraduate students enrolled in nursing courses that use WebQuests in course activities at a Midwestern university participated in the study.

Participants were recruited for the convenience sample via emails sent to learners enrolled in path physiology, community health nursing, and scholarly writing in nursing courses. Researchers obtained Institutional Review Board approval through the University. Participation in the research study by students was voluntary; students received an email invitation that explained the study, risks, benefits, and that study participation is voluntary. The informed consent form and survey link were included in the invitation email.

#### **5.4 Measures**

A qualitative and quantitative online survey developed by the researchers, called the "WebQuest Survey for Learners," was used for the study measures. The demographics included 4 items: age, gender, class standing (first year, sophomore, junior, or senior) and previous WebQuest experience. The quantitative part of the survey consisted of 26statements that participants answered using a 5-item Likert scale with 5 represented as *strongly agree* and 1 as *strongly disagree*. The approximate length of time to complete the survey was 5 to 10 minutes. The qualitative part of the survey included3 open-ended statements (total of 29 items) that focus on the strengths, weakness, and suggestions for improvement of the WebQuest teaching/learning strategy.

Expert validity of the "WebQuest Survey for Learners" was obtained by having two seasoned nursing education experts that are familiar with WebQuests evaluate the survey and provide feedback. The survey was revised by the investigators based on the expert feedback. Construct validity was achieved by the description of the constructs as outlined: WebQuests in relation to outcomes (learning outcomes), setting (courses that use the Internet for hybrid or online learning), and persons of interest (student participants) (Polit& Beck, 2008). To check for internal consistency for each of the paradigms in the survey, an alpha reliability analysis was performed for the items in each paradigm. For the active learning, facilitation, and family nursing paradigms, the reliability were .93, .96, and .95, respectively.

#### 6.0 Results

#### 6.1Demographics

The sample consisted of 28 students enrolled in nursing courses, of which 92.9% were female and 7.1% were male. The average age of students was 26.88 years (SD = 7.58). Class standing in the sample was first year (7.1%), sophomore (25.0%), junior (32.1%), and senior (35.7%). Participants reported that 28.6% had previous experience with WebQuests, while 71.4% had no previous experience with WebQuests.

#### **6.2Data Analysis**

The Statistical Package for Social Sciences (SPSS) (version 15.0, SPSS Inc., Chicago, IL) program was used for data analysis. Descriptive statistics were performed on the demographic and Likert-type quantitative items. Qualitative data was analyzed using content analysis to discover major themes that emerged in the data.

#### **6.3 Quantitative Results**

The first research question asked to identify the strengths of using a WebQuest for learning from the learner's point of view. All participants reported strengths of the WebQuest as easy to navigate the WebQuest, being an active participant in the learning activity, the learning objectives were clearly stated, the WebQuest was well organized, and the WebQuest had a positive tone (100% strongly agree/agree) (See Table 1 for scaling of items by participants.).

Research Question 2 focused on facilitation successes and areas for improvement with the WebQuest from the learner's point of view. A majority of participants reported favorable use with the WebQuest in relation to organization, ease of use, allowing one to learn at their own pace, encouraging reflective thinking, and including helpful sources. All participants reported the WebQuest was well organized and the learning objectives were clearly stated (100% strongly agree/agree). Most participants reported the ability to learn at one's own pace (96% strongly agree/agree). Furthermore, a majority of participants reported the WebQuest encouraged reflective thinking (89% strongly agree/agree). Learners reported an area for improvement (82% strongly agree/agree) as thinking of new ideas or situations while doing the WebQuest.

An area for improvement identified by participants was the WebQuest progression from simple to complex learning (77% strongly agree/agree).

**Table 1: WebQuest Survey for Learner Responses** 

| Survey Statement Items        |  | Mean | SD  |
|-------------------------------|--|------|-----|
| I.Use of the Nursing WebQuest |  |      |     |
| 1.                            | The menu design made it easy to navigate the WebQuest.             | 4.85 | .35 |
| 2.                            | The sources found on the WebQuest saved time so I could            |      |     |
|                               | focus on learning.   | 4.67 | .54 |
| 3.                            | The font used on the WebQuest was easy to read.                    | 4.78 | .56 |
| 4.                            | I found the WebQuest to be user friendly.                          | 4.77 | .50 |
|                               | II. The Active Learning Paradigm                                   |      |     |
| 1.                            | I was an active participant in the WebQuest learning activity.     | 4.71 | .46 |
| 2.                            | I used reflection thinking with the WebQuest learning activity.    | 4.67 | .72 |
| 3.                            | I thought of ideas related to new situations or knowledge in the   |      |     |
|                               | WebQuest.  | 4.42 | .79 |
| 4.                            | I used analysis skills with the WebQuest learning activity.        | 4.60 | .62 |
| 5.                            | I discovered something I had not known before while doing the      |      |     |
|                               | WebQuest.  | 4.60 | .62 |
| 6.                            | I judged or assessed the worth of something while doing the        |      |     |
|                               | WebQuest.  | 4.46 | .79 |
|                               | III. The Facilitation Paradigm                                     |      |     |
| 1.                            | The learning objectives of the WebQuest were clearly stated.       | 4.73 | .45 |
| 2.                            | The sources in the WebQuest were helpful.                          | 4.57 | .57 |
| 3.                            | The WebQuest was easy to follow.                                   | 4.61 | .57 |
| 4.                            | The WebQuest was well organized.                                   | 4.80 | .40 |
| 5.                            | The WebQuest allowed me to learn at my own pace.                   | 4.84 | .46 |
| 6.                            | The WebQuest had a positive tone.                                  | 4.72 | .45 |
| 7.                            | The WebQuest had a variety of medium, such as words, art,          |      |     |
|                               | video and websites.  | 4.68 | .62 |
| 8.                            | The WebQuest activity progressed from simple to complex            |      |     |
|                               | learning.  | 4.34 | .84 |
| 9.                            | The WebQuest encouraged reflective thinking.                       | 4.53 | .70 |
| IV                            | . The Family Nursing Paradigm                                      |      |     |
| 1.                            | Family nursing was integrated into the WebQuest learning activity. | 4.52 | .65 |
| 2.                            | The WebQuest prompted me to think of ways to interact with         |      |     |
|                               | patients and families.   | 4.68 | .55 |
| 3.                            | The WebQuest incorporated nursing interventions that included      |      |     |
|                               | the family.  | 4.64 | .56 |
|                               | •  |      |     |

The third research question asked for factors related to family nursing content and WebQuest use from the learner's point of view. A majority of participants reported the WebQuest activity prompted learners to think of ways to interact with patients and families (96% strongly agree/agree) and incorporated nursing interventions that included the family (92% strongly agree/agree). Participants reported integration of family nursing into the WebQuest learning activity (92% strongly agree/agree). There were no disagree/strongly disagree responses in the family nursing paradigm.

#### **6.4 Qualitative Results**

The first qualitative question asked about strengths of the WebQuest. Content analysis was completed and the themes identified include easy to use, resources, and organization. One verbatim response in the *easy to use* theme was "easy to follow, info was provided in different forms, able to take as much time as needed to get through the material." A verbatim response related to the *resource* theme was, "they offered a lot of information and resources." The positive tone and content of the comments indicates participants saw strengths in using the WebQuest learning activity. The *organization* theme had two identical responses of "well-organized" as strengths by learners. Another verbatim comment was, "The WebQuest helped me to organize and sort my thoughts on my plan to work with my family." This statement reflects higher order thinking by the learner related to the WebQuest.

The second qualitative question focused on the weaknesses of the WebQuest. Time was the dominant theme that emerged from this data. Selected verbatim responses include "takes time" and "time." One participant commented "no personal interaction" and one participant responded "sometimes difficult to navigate back and forth among different areas."

The third qualitative question asked for suggestions to make the WebQuest a better learning strategy. Only three comments were received, making the analysis minimal. The verbatim comments included "none," "maybe make the design a bit more interesting," and "make them shorter." One comment that referred to making the WebQuest shorter corresponds to comments received for the second qualitative question, and thus continues the time theme from the second qualitative question.

#### 6.5Discussion

This study examines the learner's point of view of strengths and areas for improvement with the teaching/learning strategy WebQuests. Participant feedback revealed that they experienced the WebQuest activity as a positive one. One area of strength was the use of higher order thinking skills during the WebQuest activity. Participants reported a strength of the WebQuest teaching/learning strategy was the use of reflection, analysis, assessment, evaluation, and the discovery of new ideas. Similarly, Gulbahar, Madran, and Kalelioglu(2010) report that thinking about real-life problems, considering other viewpoints, and the benefit of new views of issues and situations was a contribution of the WebQuest activity. Family therapy students related the use of WebQuests was an active learning experience that used critical thinking and creative thinking (Lim & Hernandez, 2007). All of the participants in this study reported they were actively engaged in the WebQuest activity. Likewise, other researchers reported WebQuests were effective in promoting learner engagement (Abbit & Ophus, 2008; Burchum et al., 2007; Drozd & O'Donoghue, 2007; Lim & Hernandez, 2007; Zheng, Perez, Williamson, & Flygare, 2007).

Learners reported that WebQuests are a good fit for family nursing content. Specifically, 96 percent of participants reported that the WebQuest prompted thinking about ways to interact with patients and families. One participant commented that the WebQuest helped the learner to organize and plan their work with a family. This is similar to the findings that family therapy students reported regarding WebQuests being interesting because of the application to authentic family contexts (Lim & Hernandez, 2007).

Although there is no research published that addresses the use of WebQuests with Family Nursing content, this study and the study by Lim and Hernandez (2007) both found that real life application was a strength of the learning experience.

In this study, two qualitative comments from participants stated that the WebQuest included useful information and resources. Survey responses indicate that 96 percent of participants reported the sources as helpful.

Tuan (2011) also reported that 80 percent of participants indicated the content and links in the WebQuest were beneficial. Additionally, questers are able to find information easily in the WebQuests and have time to look for additional sources as well (Gaskill, McNulty, & Brooks, 2006).

Areas for improvement reported were improving progression from simple to complex learning in the WebQuest design, more judging/evaluating the worth of something (for example, an intervention or clarify of an essay), and improved navigation. In this study, one comment was made that is was challenging to move back and forth between areas in the WebQuest. Yet the survey item "The menu design made it easy to navigate the WebQuest" had a mean score of 4.85 out of 5.0, and all participants agreed or strongly agreed with the item. However, the desire is that no learner is lost in WebQuest navigation. In a study of 11 nursing students, difficulties navigating the WebQuest were conveyed (Drozd & O'Donoghue, 2007). This is valuable information to incorporate in design so that learners are not confused while navigating the WebQuest. Nurse educators can build in additional navigation cues and graphics to help questers move about the WebQuest more efficiently.

In this study, learners cited time as a limitation of using the WebQuest. As reported in the review of literature, a study of students in tourism management, hospitality management, and leisure management reported that they would recommend the WebQuest strategy to other learners, but that it does take time to learn the WebQuest structure (Hassanien, 2006). Short WebQuests may be more appealing to learners as less time is required to complete a shorted WebQuest. Educators can design short WebQuests that are specific and focused so the activity uses less time. The participant responses provide educators with specific ideas to improve the WebQuest strategy. Overall, WebQuests are positive teaching/learning experiences for learners.

#### **6.7 Limitations**

Although the results of this study are promising for WebQuest use in family nursing education, there are limitations. The sample size of 28 is small; further study with a larger sample size is warranted. The content area of the WebQuests used a family nursing focus; further research of WebQuest use in nursing education in other content areas would provide data in other content areas.

#### 7.0 Conclusion

WebQuests engage students in active learning through inquiry and the use of online technology (Burchum et al., 2007). In this study, all participants reported being actively engaged in the WebQuest learning activity, the WebQuest learning activity as being well organized, easy to navigate, with clearly defined learning objectives, and a positive tone. Areas for improvement were to increase the skills of judgment or evaluation in the WebQuest activity, and improve navigation of the WebQuest. This research added to the body of evidence about the use of WebQuests in nursing education by studying the learner's perspective. Nurse educators should consider this data when designing WebQuests. A recommendation is for future studies to explore the effectiveness of the learning strategy, learner perspectives, and nurse educator perspectives.

Other uses of WebQuests, such as professional nursing development and client education, such as with adolescents, are also worthy of research since many K-12 students are familiar with WebQuests. WebQuests are instructional and learning tools for usein promoting higher level learning in nursing learners.

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